BBMP, RR Nagar

Government of Karnataka

Form No. PWG-45

Estimate Amount: 300.00 Lakhs

Name of the work:-Comprehensive development of Roads and Drains in Ward no 16 Rajarajeshwari Nagara Assembly Constituency Under PACKAGE - [illegible]

Sl	Description of Item	Unit	As per Sanction Estimate	As per Tender			Total Executed Qty	Up to 125%			Above 125% more than tender Qty			Total Amount	Amount	
			Amount	Qty	Rate	Amount	Qty	Qty	Rate	Amount	Qty	Rate	Amount		Excess	Savings
1	2	3	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	Removing & Refixing stone slabs of drains and pointing in C.M (1:3)complete as per the direction of Engineer in charge	Sqm	1818694.22	15544.40	117.00	1818694.22	11876.37	11876.37	117.00	1389535.03	0.00	117.00	0.00	1389535.03	[illegible]	[illegible]
2	Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per the direction of Engineer in charge	Cum	2103600.48	8482.26	248.00	2103600.48	8765.20	8765.20	248.00	2173769.45	0.00	248.00	0.00	2173770.00	[illegible]	[illegible]
3	Plain cement concrete 1:3:6 mix with crushed stone aggregate 40 m nominal size mechanically mixed, placed in foundation and compacted by vibration including curing complete as per the direction of Engineer in charge	Sqm	1016910.72	216.18	4704.00	1016910.72	268.44	268.44	4704.00	1262764.34	0.00	5261.76	0.00	1262763.00	[illegible]	[illegible]
4	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specifications.Wall & bottom thickness 15cm complete as per the direction of Engineer in charge	Cum	4779793.92	643.83	7424.00	4779793.92	803.66	803.66	7424.00	5966401.54	0.00	8418.41	0.00	5966402.00	[illegible]	[illegible]
5	Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 TMT Bars Fe 500 complete as per the direction of Engineer in charge	ton	3055237.79	40.23	75942.00	3055237.79	104.52	50.29	75942.00	3819047.24	54.24	78771.59	4272202.22	8091250.00	[illegible]	[illegible]
6	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar, stone hammered dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, curing complete as per specifications. - do - cement mortar 1:6 complete as per the direction of Engineer in charge	Cum	423273.60	82.80	5112.00	423273.60	82.80	82.80	5112.00	423273.60	0.00	6027.36	0.00	423274.00	[illegible]	[illegible]
7	Providing and constructing precast concrete solid blocks with compressive strength not less than 3.5 Newton per sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x15x20cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications.-do with solid concrete blocks of size 400*200*200 mm complete as per the direction of Engineer in charge	Sqm	6655964.00	6557.60	1015.00	6655964.00	6257.29	6257.29	1015.00	6351147.32	0.00	0.00	0.00	6351148.00	[illegible]	[illegible]
8	Providing ruled pointing to coursed stone masonry with cement mortar, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, HOM curing complete as per specifications.- do - cement mortar 1:3complete as per the direction of Engineer in charge	Cum	3544508.80	22433.60	158.00	3544508.80	12300.20	12300.20	158.00	1943430.97	0.00	0.00	0.00	1943431.00	[illegible]	[illegible]
9	Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in For Coping , including cost of all materials, labour, HOM curing complete as per the direction of Engineer in charge	Cum	3039372.00	516.90	5880.00	3039372.00	476.50	476.50	5880.00	2801022.94	0.00	0.00	0.00	2801023.00	[illegible]	[illegible]

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10	Providing and laying in position plain cement concrete of M15 (1:2:4 Nominal Mix) @ 2400 kg/cum with 20mm and down size graded granite metal coarse aggregate @ 0.870 cum and fine aggregate @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per the direction of Engineer in charge	Cum	206161635	341.61	603.00	1000000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00
11	Providing & laying precast drain cover slab of 100 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc, complete as per the directions of the Engineer In Charge (0.9 x 0.60 x 0.1)	Sqm	12400810.47	5053.31	2454.00	12400810.47	5053.31	5053.31	2454.00	12400810.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Providing and Fixing RCC Precast Cover Slab of 250 mm Thick for Drains in Cement Concrete M 20 using graded granite jelly of 20 mm and down size with steel Reinforcement, including form work lift charges, curing and concrete finished surface on both sides etc., complete as per the direction of Engineer in charge	Sqm	892545.00	157.00	5685.00	892545.00	690.65	196.25	5685.00	1115681.25	494.40	6027.36	2979452.11	4995634.00	12500000.00	0.00	29817.39				
13	Removing and resetting of kerb stones complete as per the direction of Engineer in charge	Rmt	1106407.50	10058.25	110.00	1106407.50	9707.18	9707.18	110.00	1076589.69	0.00	0.00	0.00	1076589.00	0.00	0.00	485198.00				
14	Providing and fixing pre cast solid concrete kerb stones of size 450x150x500 mm made out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc, complete as per the direction of Engineer in charge	no's	5842900.00	11900.00	491.00	5842900.00	10922.00	10922.00	491.00	5362702.00	0.00	0.00	0.00	5362702.00	0.00	0.00	548702.80				
15	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per the direction of Engineer in charge	Sqm	548702.80	6165.20	89.00	548702.80	0.00	0.00	89.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
16	Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of modified proctors density complete as per the direction of Engineer in charge	Cum	23869320	661.20	361.00	23869320	95.94	95.94	361.00	34634.34	0.00	0.00	0.00	34635.00	0.00	0.00	2949558.20				
17	Providing and laying heavy duty cobble stones 75mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per the direction of Engineer in charge	Sqm	2578680.00	2088.00	1235.00	2578680.00	319.80	319.80	1235.00	394953.00	0.00	0.00	0.00	394953.00	0.00	0.00	2183727.00				
18	Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per the direction of Engineer in charge	Cum	316800.31	3559.55	89.00	316800.31	3559.55	3559.55	89.00	316800.31	0.00	0.00	0.00	316802.00	0.00	0.00	0.00				
19	Construction of granular sub base Grading V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per the direction of Engineer in charge	Cum	5143281.13	2466.80	2085.00	5143281.13	2378.37	2378.37	2085.00	4958893.53	0.00	0.00	0.00	4958894.00	0.00	0.00	184387.13				
20	Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per the direction of Engineer in charge	Cum	5733610.93	2728.99	2101.00	5733610.93	2728.99	2728.99	2101.00	5733618.93	0.00	0.00	0.00	5733611.00	0.07	0.00					
21	Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular base such as WBM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications MORTH Specification No. 502 complete as per the direction of Engineer in charge	Sqm	367820.58	11865.18	31.00	367820.58	11865.18	11865.18	31.00	367820.58	0.00	0.00	0.00	367821.00	0.42	0.00					
22	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials labour, HOM complete as per the direction of Engineer in charge	Sqm	203735.52	33955.92	6.00	203735.52	33955.92	33955.92	6.00	203735.52	0.00	0.00	0.00	203736.00	0.48	0.00					
23	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per the direction of Engineer in charge	Sqm	11623756.63	89413.51	13.00	11623756.63	89413.51	89413.51	13.00	1162375.63	0.00	0.00	0.00	1162376.00	0.37	0.00					

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24	Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications. Clause 505 of morth V revision using 40/60 TPH capacity H.M.P. with mechanical paver Cr-II (50mm to 75mm) with 4.5% VG-30 Bitumen complete as per the direction of Engineer in charge	Cum	16884396.00	2345.00	7200.00	16884396.00	2345.00	2345.00	7200.00										

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25	Providing and laying bituminous concrete using crushed aggregates of specified grading premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 507 of MORTH V revision, -using40/60 TPH capacity H M P with Mechanical Paver Gr-II (30 mm to 40 mm) with 5.4% VG-30 Bitumen complete as per the direction of Engineer in charge	Cum	15580545.42	1876.04	R305.00	15580545.42	1876.04	1876.04	R305.00								
26	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per the direction of Engineer in charge	Sqm	1295651.25	2716.25	477.00	1295651.25	0.00	0.00	477.00	0.00	0.00	0.00	0.00	0.00	0.00	1295651.25	
27	Providing and fixing of road stud 100x 100 mm, diecast in aluminium, resistant to corrosive effect of salt and grit, fitted with lense reflectors, installed in concrete or asphaltic surface by drilling hole 30 mm upto a depth of 60 mm and bedded in a suitable bituminous grout or epoxy mortar, all as per BS: 873 part 4 1973 complete as per the direction of Engineer in charge	no's	1178250.00	3142.00	375.00	1178250.00	0.00	0.00	375.00	0.00	0.00	0.00	0.00	0.00	0.00	1178250.00	
															0.00	0.00	
	EIRL Items																
1	KSRRB M200-12.1. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete,- wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications	Sqm					107.23	107.23	643.03	68952.48			0.00	68953.00	68953.00	0.00	
2	KSRRB M200-15.1. Dismantling of existing structures like culverts, bridges,retaining walls and other structure comprising of masonry, cement concrete,wood work, steel work, including T&P and scaffolding wherever necessary,sorting the dismantled material, disposal of unserviceable material andstacking the serviceable material with all lifts complete as per specifications,iii) Dismantling Stone Masonry MORTH Specification No. 202	Sqm					110.66	110.66	405.21	44839.46			0.00	44840.00	44840.00	0.00	
										92720880.20			7252154.33	99973046.00			
	Sub Total		99974177.61											99973046.00	98555529.63	98556661.74	
	Tender Premium & Miscelleneous					99974178.00											
	TOTAL		99974177.61														

Contractor Quoted the Rates +1% Above the S R Rates of 2018-19.

1) Estimated amount		100000000.00
2) Tendered Amount		99974071.00
3) Actual amount As per Modified Estimate (Work Slip+EIRL)		99973046.00
Percentage of (3)/(2)		0.0%
Savings		1025.00
Workslip %		0.00%
ERIL %		0.11%

Since the overall expenditure is lesser then estimated amount. The Work slip & EIRL may please be approved

Assistant Engineer
Ward No 17

ASSISTANT EXECUTIVE ENGINEER
Rashtrothana Upa Vibhaga
ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಯಶವಂತಪುರ ಉಪ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

EXECUTIVE ENGINEER
RR Nagar Division

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